

# Army Trauma Training

US Army Medical Department Center and School

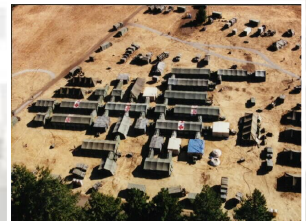
***“Ensuring AMEDD Success”***



**AMEDD STRONG**

# Army Trauma Training Goal

**To improve the survival rate of our Soldiers injured on the battlefield through a comprehensive trauma training strategy.**

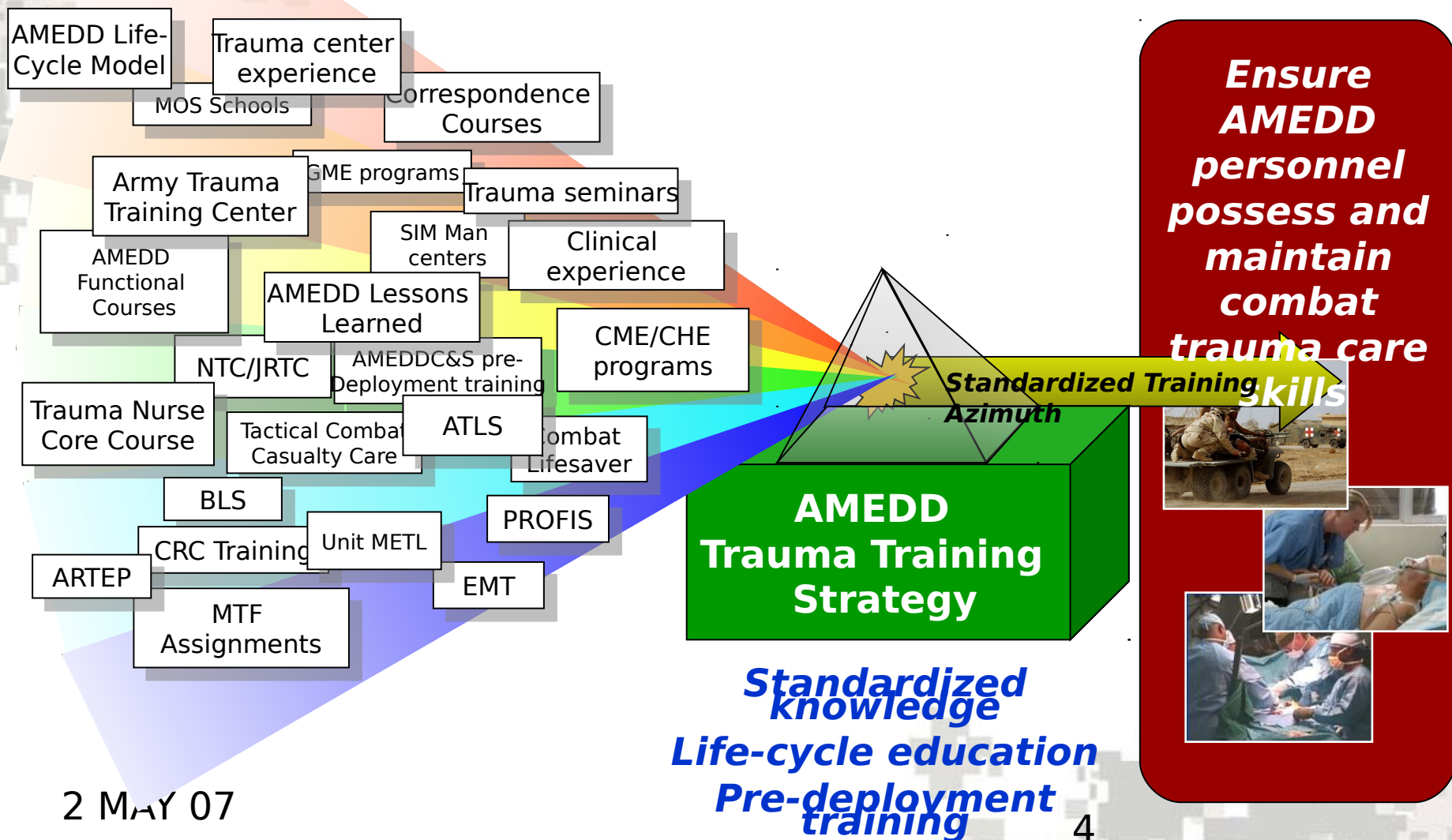


# The Army Trauma Training Strategy

- The Need for a Trauma Training Strategy
- Army Trauma Training Life-cycle
- Tactical Combat Casualty Care
- Comprehensive AMEDD Trauma Training Strategy
  - Didactic programs
    - AMEDDC&S Deployment Portal
    - Pre-Deployment Training Courses
  - Simulation training
  - Clinical Experiences
- Lessons Learned
- AMEDD Trauma Training Initiatives

# Trauma Training:

## The need for a comprehensive strategy

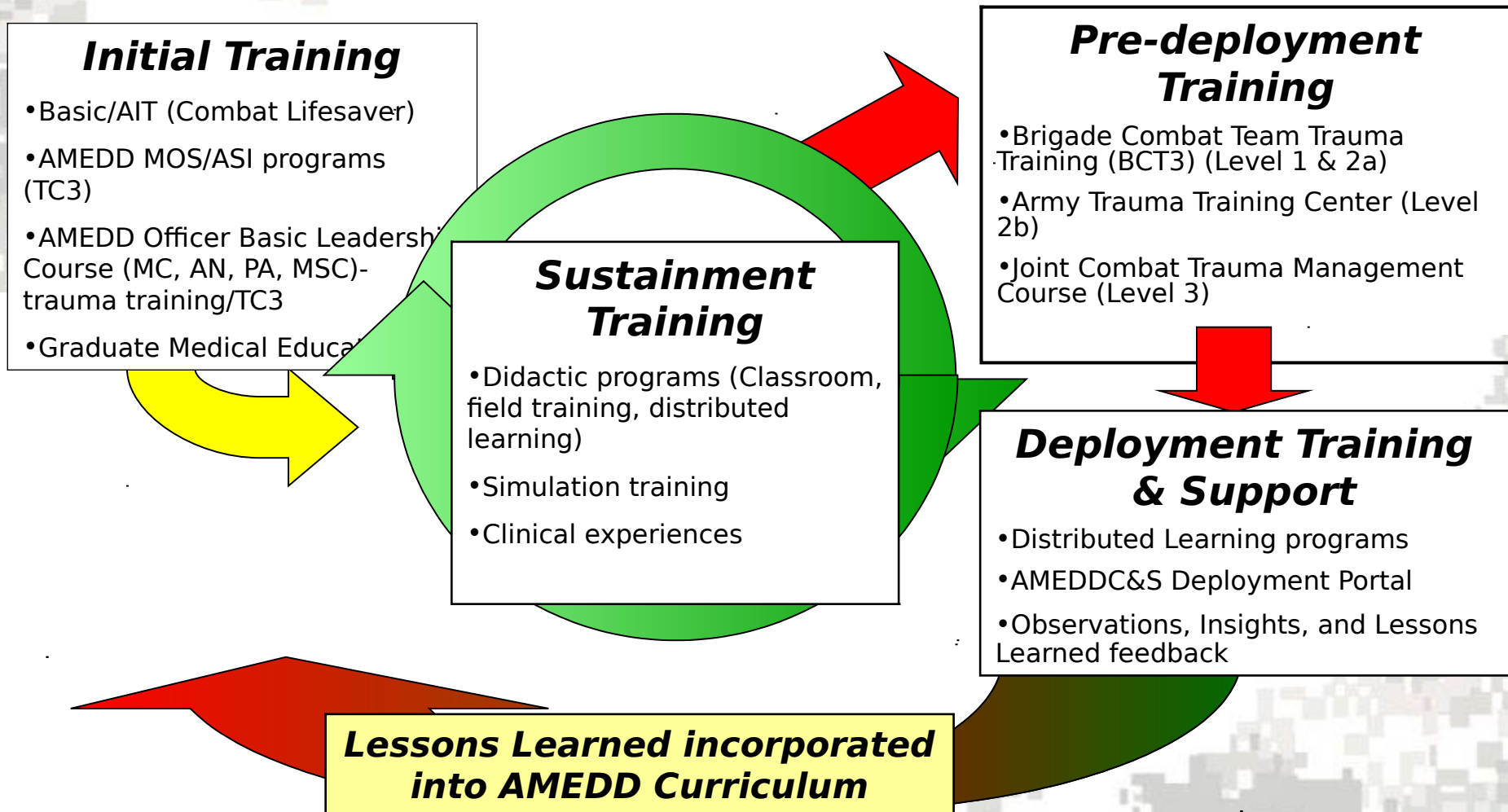


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# Army Trauma Training Life-cycle

*Training and sustaining, everywhere!*



# Tactical Combat Casualty Care (TC3)

## The Foundation

- Battlefield Trauma Care is Different than Civilian Trauma Care!
- TC3 focuses on preventable causes of death: bleeding, airway obstruction, pneumothorax
- Incorporated into Combat Lifesaver Training and AMEDD trauma training programs and courses

### Care under fire



**Protect self & casualty**

**Stop major bleeding**

**Move casualty to cover**

### Tactical Field Care



**Rapid trauma assessment**

**Treat preventable causes of death**

**Stabilize and prepare for evacuation**

### Combat Casualty Evacuation Care



**Stabilization and treatment  
(dependant on evacuation mode)**



Goals of TC3:

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*Treat the casualty. Prevent additional casualties. Complete the mission*

# Comprehensive AMEDD Trauma Training Strategy

*Individual and collective training requirements are determined by...*

- Individual's training and deployment experience
- Recurrent training and certification programs
- Unit mission requirements and essential tasks

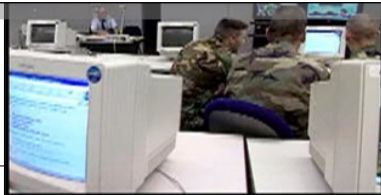
- Individual's scope of practice and skill level
- Lessons learned and field observations
- Theater Trauma Registry Procedure Data

## Cognitive

## Psychomotor Skills

### Didactic Training Phase

- MOS/ASI/AOC producing courses
- AMEDDC&S Post Professional Short Courses
- GME military unique curriculum/lectures
- CME/CHE activities
- Distributed Learning programs
- MTF lectures, conferences and symposium
- Pre-deployment training (CRC/90-180 rotators)



### Simulation Training Phase

- Conducted at MTFs, TOE Units, & at Medical Simulation Training Centers
- Focus on individual trauma skills and MASCAL management
- 91W transition & sustainment



### Clinical Training Phase

- Military treatment facilities
- Army Trauma Training Center
- Regional Trauma Training at civilian Level I trauma centers



**Training Throughout the AMEDD Life-Cycle Model**

# Trauma Training Strategy

## Phase 1: Didactic Training Phase

- Consists of classroom, conference, DL, field training exercises and web-based
- GME/CME/CHE and in-service programs
- MTF, TOE unit, NTC, pre-deployment



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# AMEDDC&S Deployment Portal

<http://www.cs.amedd.army.mil/Deployment/default.aspx>

## AMEDD Center & School Deployment Portal

### Welcome to the AMEDD Center & School Deployment Portal

Resources to allow deployed Soldiers to easily access information by level of care or medical functional area. Resources include the Internet, CDs, and other media and will be designed to adapt to deployed Soldiers needs.

[> To AMEDD Center & School Portal](#)

#### LEVEL I-II (First Responder)

- [Division/Brigade Surgeon Course](#)
- [Combat Life Saver](#)
- [Deployment Relevant Training](#)
- [DoD Medical Material Quality Control Messages](#)
- [Field Sanitation Team Training \(Under Construction\)](#)
- [Medical Unit Assemblages](#)
- [Supply Bulletins](#)
- [Tactical Combat Casualty Care \(TCCC\)](#)
- [Unit & Individual Medical Readiness - The Medical Protection System](#)

#### LEVEL III

- [Deployment Relevant Training](#)
- [DoD Medical Material Quality Control Messages](#)
- [Medical Unit Assemblages](#)
- [The AMEDD Disease & Non-Battle Injury \(DNBI\) Admission Rate Estimation Model](#)
- [The Combat Casualty Data Warehouse](#)
- [Supply Bulletins](#)
- [Unit & Individual Medical Readiness - The Medical Protection System](#)

#### LEVEL IV-V

- [US Army Medical Department \(AMEDD\)](#)
- [AMEDD Leaders and Organizations](#)
- [Deployment Relevant Training](#)
- [USACHPPM - Main](#)
  - [USACHPPM Europe](#)
  - [USACHPPM North](#)
  - [USACHPPM Pacific](#)
  - [USACHPPM South](#)
  - [USACHPPM West](#)
- [US Army Medical Research & Materiel Command](#)
- [USA Medical Materiel Agency](#)
- [US DoD Military Health System](#)
- [Center for AMEDD Strategic Studies \(CASS\)](#)
- [Walter Reed Army Medical Center](#)

#### All Levels of Care

- [Joint Patient Tracking Application \(JPTA\)](#)
- [Medical Operational Data System \(MODS\)](#)
- [Unit & Individual Medical Readiness - The Medical Protection System \(MEDPROS\)](#)

#### MEDICAL FUNCTIONAL AREA

- [Medical Command, Control, Communications and Intelligence \(C4I\)](#)
  - [CIA World Factbook](#)
  - [Defense Information System Agency \(The DSI Telephone Directory\)](#)
  - [Defense Support to Civilian Authority \(DSCA\)](#)

#### Special Topics

[Diagnosis and Treatment of Disease of Tactical Importance to U.S. Central Command](#)

Developed by AMEDD Knowledge Management (Medical Capabilities and Integration Center)

**One-stop** site for deployed AMEDD Soldiers for easily accessible information organized by level of care and functional area

References to internet, CD, and other media

Designed to adapt to deployed Soldiers' needs

# AMEDD Pre-deployment Trauma Courses

**Level I-II providers**  
**First Responder Care**  
(BCT Surgeons, PAs, medics)

**Brigade Combat Team Trauma Training**



- 1 week course. Requires 2 sessions to train brigade (120 personnel /week)
- Trains providers and medics on Tactical Combat Casualty Care concepts, trauma management skills and Lessons Learned

**Level II-b providers**  
**Forward Resuscitative Care** (Forward Surgical Teams)

**Training Center**



- Conducted at the Ryder Trauma Center in Miami, FL
- Provides real-world trauma training using a "teamwork model" at a major Level I Trauma Center

**Level III providers**  
**Theater Hospitalization**  
(Combat Support Hospitals)  
**Trauma**



- Conducted by USAISR, AMEDDC&S, BAMC and WHMC
- Consists of series of multidisciplinary, combat-related trauma lectures and break-out skill sessions for surgeons, physicians and nursing personnel

*Ensuring AMEDD Success.... Saving Soldiers' lives!*

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# Brigade Combat Team Trauma Training (BCT3)

Pre-deployment trauma training program for AMEDD personnel assigned to deploying BCTs

## • Program Summary:

- 5-day program conducted via Mobile Training Team to CONUS installations (Training capacity: 120 personnel per week)
- Targeted to medical officers, physician assistants, nurses, and 68W Skill level 10-40 assigned to Brigade Combat Teams
- Lecture, combat trauma lanes, and skills lab
- Incorporates Tactical Combat Casualty Care into common core skill sets applicable to Level I thru Level III echelons of care
- Common core content with advance training for higher level providers



### Curriculum

Point of Wounding Care  
Combat Triage  
Primary/Secondary Survey  
Airway  
Transfusion <sup>(1)</sup>  
Antibiotics /Pain  
Shock Resuscitation  
Wound care  
Head/Neck Trauma  
Extremity Trauma  
Chest Trauma  
Thermal Burns  
Blast Injury  
Altitude Illness  
CASEVAC  
Surgical Skills Lab  
Trauma Lanes  
Rapid sequence intubation <sup>(1)</sup>  
Detainee Care <sup>(2)</sup>  
Humanitarian Law <sup>(2)</sup>  
Geriatric <sup>(2)</sup>  
Pediatric <sup>(2)</sup>  
OB Trauma <sup>(2)</sup>  
Care of remains <sup>(2)</sup>



2 MAY 07 **Over 600 Soldier-Medics Trained (SEP 06-APR 07)**

(1) Provided to MC, AN, PA's, and senior level medical personnel  
(2) All training provided to 68W10-30 level medics



# Army Trauma Training Center

- Trauma team training for combat using an innovative “Trauma Teamwork Model”
- Conducted at the University of Miami/Jackson Memorial Medical Center’s Ryder Trauma Center
- 2-week training program for Forward Surgical and Combat Support Hospital Teams consisting of:
  - Trauma Team Development
  - Core trauma lectures and discussions
  - Anatomical and Trauma Skills Labs
  - Combat trauma simulations
  - DOD Extremity War Surgery Course
  - Level I Trauma Center clinical experience



**Department of Defense Center of Excellence for Combat Casualty Care Team Training (2005)**

**2 MAY 07 Department of Defense Patient Safety Award -Team Training (2005)**



# Joint Forces Combat Trauma Management Course

- Conducted by USA Institute of Surgical Research ICW Brooke AMC and Wilford Hall Medical Center (AF)
- Provide level IIb and III medical units the necessary and most current medical knowledge / skills and advanced trauma training prior to wartime deployment
- Incorporates contemporary lessons learned
- Course Layout
  - Core trauma lecture series
  - Break out modules
    - Surgeons
    - Physicians
    - Anesthesia providers
    - Nursing personnel



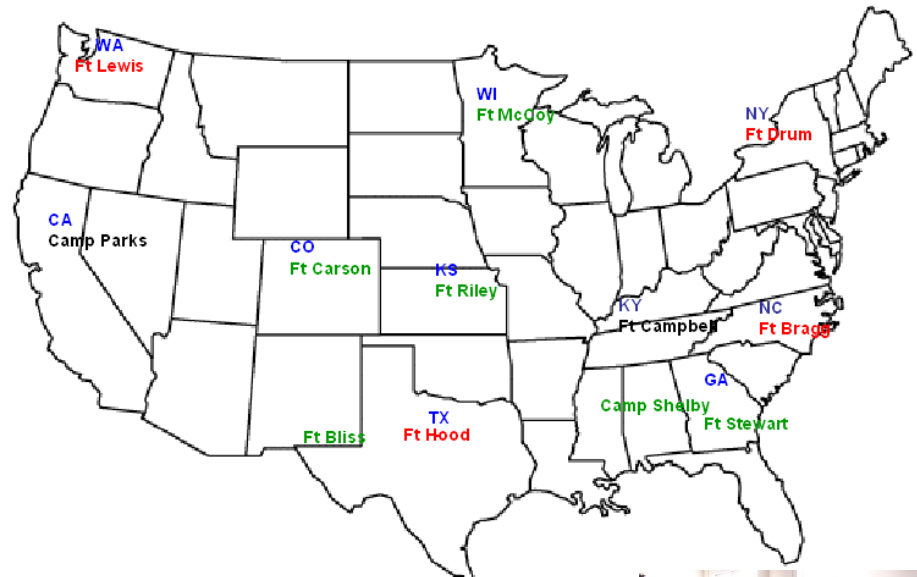
## Program content

Airway Management  
Abdominal Trauma  
Pediatric Trauma  
Triage  
Blood/Transfusion Medicine  
Extremity Trauma  
Shock/Fluid Resuscitation  
Initial Care/Stabilization  
Primary/Secondary Surveys  
Tactical Combat Casualty Care  
Thoracic Trauma  
Wound care/ Debridement  
Head/Neck Trauma  
Eye Trauma  
Live Tissue lab  
Compartment Syndrome  
Combat Resuscitation  
Burn care and management  
Hypothermia prevention

# Trauma Training Strategy

## Phase 2: Simulation Training Phase

- Hands-on individual and collective training at MTFs, TOE units, and at 21 Medical Simulation Training Centers
- Docs/RN's/PA's/medics
  - 68 W skills sustainment
  - Combat lifesaver
  - Pre-deployment skills
  - Post-deployment refresh training



### Priority 1

1. Ft Bragg
2. Ft Drum
3. Ft Hood
4. Ft Lewis
5. Balad
6. Kuwait
7. Salerno
8. Camp Phoenix
9. Bagram

### Priority 2

1. Ft Wainwright
2. Vilseck GE
3. Ft Riley
4. Ft. Bliss
5. Ft Carson
6. Ft. Campbell
7. Eighth Army
8. Camp Shelby
9. Ft Stewart
10. Ft McCoy
11. Schofield
12. Ft Dix



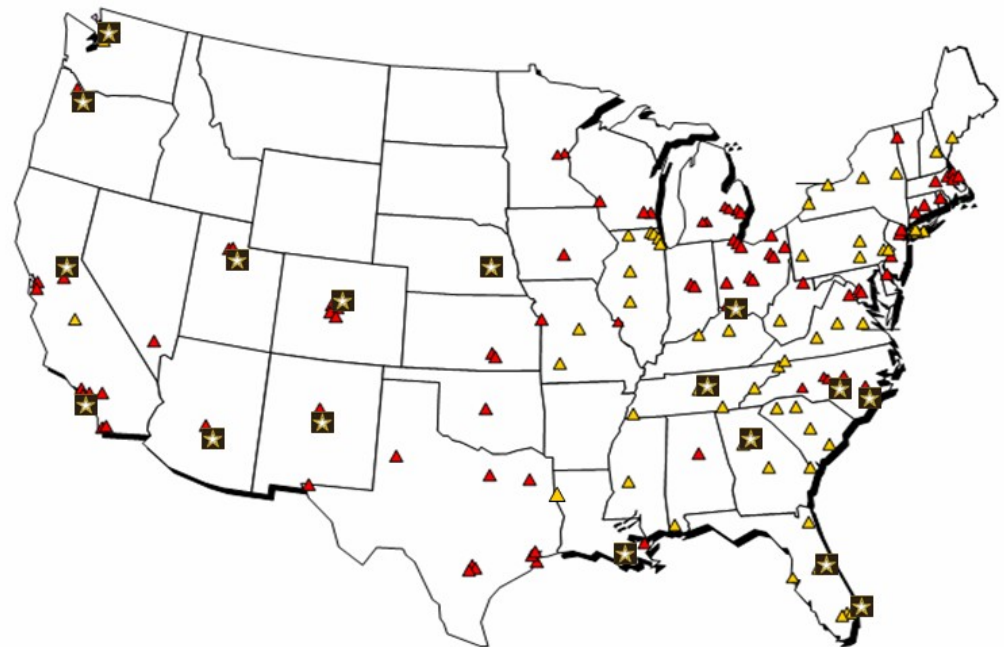
# Trauma Training Strategy

## Phase 3: Clinical Experience Phase

- MTF Assignments
- Army Trauma Training Center (Miami, FL)
- Rotations at civilian Level I trauma centers
- AMEDDC&S developing a standardized trauma curriculum



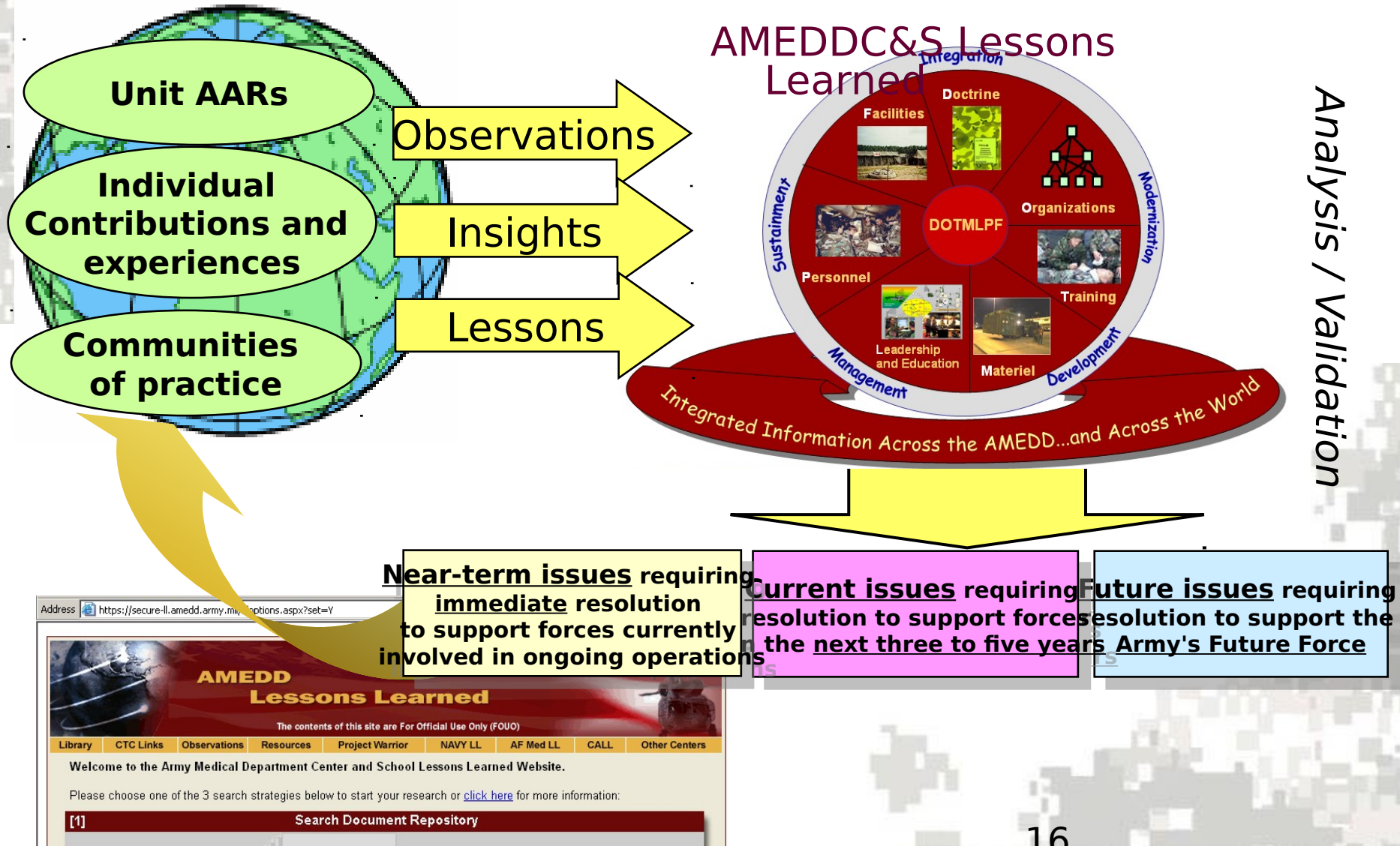
### Locations of Level I Trauma Centers



- ▲ Level I trauma center verified by American College of Surgeons
- ▲ Level I trauma center (not ACS verified)
- ★ Existing Army MOU with Trauma Center

# AMEDDD Lessons Learned

Collect, Analyze, Maintain, and Disseminate Unit Observations & Experiences

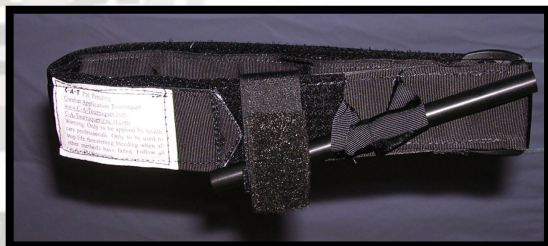




# Recent AMEDD Trauma Training Initiatives

- Tactical Combat Casualty Care (TC3)
  - TC3 web-based and Exportable Training Package developed
  - Incorporated into several AMEDDC&S classes (OBLC, enlisted and USASAM) and pre-deployment training
  - Certification program for physicians, PAs, and medics (Level I and IIa personnel)
  - EFMB course updated to include TC3
- Medical Simulation Training Centers (MSTC)
  - VCSA funded 14 sites
  - AMEDDC&S developed standard package to include equipment, facility, and personnel
  - DCMT developed Combat Medic Advanced Skill Testing (CMAST) for use as standard curriculum
  - DCMT provides medical training oversight and PEOSTRI provides technical
- Combat Lifesaver Course update (incorporate TC3)
- First Aid Course Update (incorporate CLS & TC3)
- Tactical Combat Medical Care (TCMC) for Level I and IIa medical personnel-resident course initially
- Army Trauma Training Center-updated curriculum
- Joint Combat Trauma Management Course developed by ISR for Level III personnel (conducted by AMEDDC&S, BAMC, and ISR)
- Exportable training packages (web-based and CD)
  - TC3
  - Combat application tourniquet
  - Chitosan dressing
  - IFAK/Warrior Aid Litter Kit (WALK)
- Standardized Trauma Training Curriculum under development (ICW Temple University/ATTC/ISR)
- Incorporating validated Lessons Learned into program
- Joint En Route Care Course (developed and conducted by USA School of Aviation Medicine)
- DMRTI reviewed and updated Combat Casualty Care Course (C4 Course)
- CRNA incorporated trauma training into Phase II sites
- Trauma Nurse Core Course/TC3 for nurses attending OBLC
- Trauma/Critical care modules in 68WM6 and 68D training
- Improved AMEDDC&S web site to push information to the field
- Developing standardized trauma training curriculum for MTFs/TOE units
- Working with Dr. Bill Schwab, President AAST to determine best trauma training sites across US
- Initiated BCT3 (Brigade Combat Team Trauma Training Team) program
  - Combines TCMC and 91W training into one week course on site to train BCT medical personnel
  - Two weeks to train all BCT personnel (120 personnel trained per week x 2)

# Advances in Combat Trauma Care



Combat Application  
Tourniquet



Hypothermia Prevention



Improved First Aid Kit  
(IFAK)



Fentanyl Transmucosal  
Lozenge



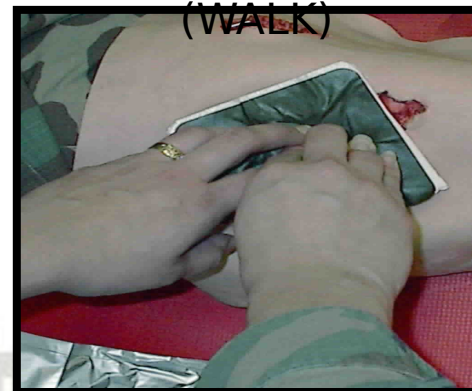
Warrior Aid and Litter Kit  
(WALK)



Combat-Pill Pack



Talon Litter

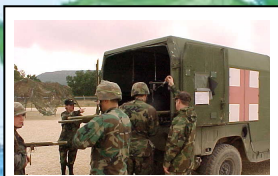


Chitosan Field Dressing

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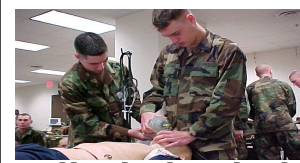
# Army Trauma Training



**RTS-Med Sites**



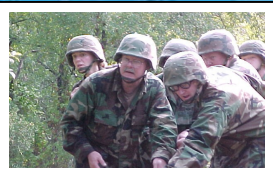
**Medical Treatment Facilities**



**Medical Simulation Training Centers**



**OIF/OEF Theater**



**NTC/JRTC/CMTC**



**AMEDDC&S**



**Trauma Centers**



**CONUS Replacement Centers**



**Combat Lifesaver**



**TOE units**



**Mobilization sites**



**Distributed Learning**

***Transitioning and sustaining, everywhere- at all levels of care!***

# Questions?

For more information on AMEDD Trauma and Pre-deployment Programs, please contact:

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